## I Claim:

- 1. A method for electronically identifying a coded part, said method comprising the steps of:
- (a) locating a machine-readable area relief pattern formed with a surface of the part, the relief pattern comprising separate and distinct code elements extending along both x and y axes, and each having a profile dimension extending along a z-axis;
- (b) measuring along the x, y, and z axes a region of interest containing the area relief pattern;
  - (c) extracting the area relief pattern from the measured region of interest; and
- (d) decoding the area relief pattern to extract part information encoded therein.
- 2. A method according to claim 1, wherein the step of measuring the region of interest comprises employing a laser line scanner adapted for projecting a laser line onto the surface of the part containing the area relief pattern.
- 3. A method according to claim 2, wherein the step of measuring the region of interest further comprises moving the coded part relative to the laser line scanner.
- 4. A method according to claim 3, and comprising measuring the region of interest

on-the-fly as the coded part is moved past the laser line scanner.

- 5. A method according to claim 4, and comprising moving the coded part past the laser line scanner at a minimum rate of 1 fps.
- 6. A method according to claim 5, and comprising arranging multiple laser line scanners at predetermined locations relative to the moving coded part.
- 7. A method according to claim 1, wherein the area relief pattern comprises a peened area code.
- 8. A method according to claim 1, wherein the coded part comprises a cast alloy wheel.
- 9. A method according to claim 8, wherein the area relief pattern is formed with a rim barrel of the wheel.

- 10. A method for electronically identifying a coded part, said method comprising the steps of:
- (a) marking an exposed surface of the part with a machine-readable area relief pattern, the relief pattern comprising separate and distinct code elements extending along both x and y axes, and each having a profile dimension extending along a z-axis;
  - (b) locating the area relief pattern on the part;
- (c) measuring along the x, y, and z axes a region of interest containing the area relief pattern;
  - (d) extracting the area relief pattern from the measured region of interest; and
- (e) decoding the area relief pattern to extract part information encoded therein.
- 11. A method according to claim 10, wherein the step of measuring the region of interest comprises employing a laser line scanner adapted for projecting a laser line onto the surface of the part containing the area relief pattern.
- 12. A method according to claim 11, wherein the step of measuring the region of interest further comprises moving the coded part relative to the laser line scanner.

- 13. A method according to claim 12, and comprising measuring the region of interest on-the-fly as the coded part is moved past the laser line scanner.
- 14. A method according to claim 13, and comprising moving the coded part past the laser line scanner at a minimum rate of 1 fps.
- 15. A method according to claim 14, and comprising arranging multiple laser line scanners at predetermined locations relative to the moving coded part.
- 16. A method according to claim 10, wherein the area relief pattern comprises a peened area code.
- 17. A method according to claim 10, wherein the coded part comprises a cast alloy wheel.
- 18. A method according to claim 17, wherein the area relief pattern is formed with a rim barrel of the wheel.